

Title (en)

MAINTAINING AND DISTRIBUTING STATE DUE TO TEMPORARY FAILURES IN A SHARED BANDWIDTH NETWORK

Title (de)

AUFRECHTERHALTUNG UND VERTEILUNG EINES ZUSTANDS AUFGRUND VON VORÜBERGEHENDEN AUSFÄLLEN IN EINEM NETZWERK MIT GEMEINSAM GENUTZTER BANDBREITE

Title (fr)

MAINTIEN ET DISTRIBUTION D'ÉTAT EN RAISON DE DÉFAILLANCES TEMPORAIRES DANS UN RÉSEAU À LARGEUR DE BANDE PARTAGÉE

Publication

**EP 3782337 B1 20230503 (EN)**

Application

**EP 19720334 A 20190416**

Priority

- US 201862659349 P 20180418
- US 201816172496 A 20181026
- US 2019027688 W 20190416

Abstract (en)

[origin: US2019327738A1] A shared bandwidth network system to communicate network traffic between terminals and an external network is disclosed. The system includes: a point of presence (POP) for the external network; Radio Frequency Gateways (RFGWs) wherein each RFGW of the RFGWs provides one or more Radio Frequency (RF) paths, and each of the RF paths links a respective RFGW of the RFGWs with one or more terminals of the terminals; an RF path state manager to manage a RF path state for each of the RF paths; a Satellite Network Core (SNC); a Software Defined Network (SDN) controller to maintain a topology based on the RF path states, wherein the topology includes the POP, the RFGWs and the SNC; and a network layer to route network traffic between the POP, the RFGWs and the SNC based on the topology. The SNC includes a bandwidth manager to allocate bandwidth, to provide flow control to the terminals, and to provide a key state including a bandwidth allocation for each of the terminals, a key state manager to maintain the key states, and a link layer control (LLC) to transport network traffic over each of the RF paths.

IPC 8 full level

**H04W 16/04** (2009.01); **H04B 7/185** (2006.01); **H04L 45/00** (2022.01); **H04L 45/12** (2022.01); **H04L 45/24** (2022.01); **H04L 45/28** (2022.01); **H04L 45/302** (2022.01); **H04L 45/64** (2022.01); **H04W 24/02** (2009.01); **H04W 84/06** (2009.01)

CPC (source: EP US)

**H04B 7/18513** (2013.01 - EP); **H04L 45/28** (2013.01 - EP); **H04L 45/306** (2013.01 - EP); **H04L 45/64** (2013.01 - EP); **H04W 16/02** (2013.01 - US); **H04W 16/04** (2013.01 - EP); **H04W 24/02** (2013.01 - EP); **H04W 72/0453** (2013.01 - US); **H04L 45/123** (2013.01 - EP); **H04L 45/22** (2013.01 - EP); **H04L 45/245** (2013.01 - EP); **H04L 45/34** (2013.01 - EP); **H04W 84/06** (2013.01 - EP US)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

**US 10667264 B2 20200526; US 2019327738 A1 20191024;** BR 112020021124 A2 20210217; EP 3782337 A1 20210224;  
EP 3782337 B1 20230503; US 11026231 B2 20210601; US 2020252938 A1 20200806; WO 2019204312 A1 20191024

DOCDB simple family (application)

**US 201816172496 A 20181026;** BR 112020021124 A 20190416; EP 19720334 A 20190416; US 2019027688 W 20190416;  
US 202016856712 A 20200423